

TREATMENT OF PENILE CONDYLOMATA ACUMINATA WITH PODOPHYLLIN¹

OBSERVATIONS ON THE PREVENTION OF BALANITIS

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In the past, condylomata acuminata have been treated by surgical excision, irradiation, application of escharotics, and removal by cautery. Regardless of the form of therapy, recurrences have been frequent. With the introduction of podophyllin, a notable advance has been made in the treatment of this disorder.

Kaplan (1) used a single application of 25% podophyllin in mineral oil in a series of twenty patients of which twelve were female and eight were male. All lesions were cured within two to five days, despite complications of pain, inflammation and edema of the normal tissues surrounding the growths. Culp, Magid, and Kaplan (2) reported a series of sixty-two patients treated with podophyllin in oil. Of these, fifty-six were cured with one application, five patients required a second application and one patient was cured after a third application. Thirty-five patients were treated with a paste of podophyllin and water and it was reported that only two of the patients required a second application. There were no recurrences after the use of the paste and only two recurrences were observed after the use of the oil suspension. The only complication in both series was balanitis in twelve patients, a majority of these occurring subsequent to the application of the paste. Three patients required a dorsal slit or circumcision. Culp and Kaplan (3) treated two hundred patients with applications of 25% suspension of podophyllin in mineral oil. The authors observed that in most instances the condylomata disappeared within three days without any surrounding tissue reaction. In 83.5% of the patients, there was no discomfort, but in isolated cases, balanitis developed. It was noted by the authors that this complication could be avoided by removing the podophyllin with soap and water twenty-four hours after treatment. Macgregor (4) used the same treatment in twenty-five patients with condylomata acuminata. He stated that the podophyllin must remain in contact with the condylomata for from six to eight hours without being removed or absorbed in order to obtain good results.

To investigate the effects of podophyllin, thirty-six uncircumcised soldiers with condylomata acuminata of the prepuce and glans penis were treated with 25% podophyllin in mineral oil. All of the soldiers had negative Kahn reactions of the blood serum. Care was taken to avoid too liberal an application of the podophyllin and, wherever possible, to avoid spread of the oil suspension to normal tissue. The first six patients who were treated returned twenty-four hours after the podophyllin application complaining of intense pain accompanied by severe edema of the prepuce. Twenty-four to forty-eight hours later, because of the severity of symptoms and edema, dorsal slit operations were performed on these six soldiers. The seventh patient returned one month later with chronic balanitis and an irretractable prepuce requiring a dorsal slit oper-

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Received for publication July 26, 1946.

ation for proper drainage. It was necessary in all seven patients to administer routine therapy for cellulitis for one to three weeks before circumcision was undertaken.

The next five patients were instructed to remove the podophyllin with soap and water ten hours after application. These five patients returned twenty-four to seventy-two hours later with severe pain and edema of the treated parts. They required dorsal slit operations and subsequent local therapy of wet dressings before circumcision was carried out. In the preceding twelve soldiers there were no recurrences of the condylomata during a three-month period of observation.

The next five soldiers with condylomata acuminata were instructed to remove the podophyllin with soap and water after three hours. Within three days, the growths had disappeared completely, but recurred about three weeks later. Five other patients were treated identically and the results were the same, with recurrence within six weeks after the application of podophyllin. Three patients, however, required two such treatments, given five days apart, before the lesions disappeared, but there were no recurrences in any of these three soldiers after six weeks. At no time did any of the men receiving a three-hour treatment complain of discomfort or edema.

One patient who had been circumcised gave a history of recurrent condylomata. He had been treated to no avail with nearly every type of therapy except podophyllin. Twenty-five percent podophyllin in mineral oil was applied and removed after five hours with soap and water. Within three days, a marked diminution of the size of the growths was observed. At no time did this patient have any discomfort nor at any time were the adjacent normal tissues affected. Five days following the first application a similar treatment was given and the condylomata disappeared without any complications. Because of the results in this case, ten soldiers were circumcised and after the operative sites had healed, podophyllin in oil was applied to their condylomata for five hours. In these ten patients, adjacent tissues remained normal and there were no symptoms of discomfort or pain. Six patients required a second application but in all ten patients the condylomata disappeared. During a three-month period of observation, there were no recurrences.

COMMENT

In a series of thirty-six men with condylomata acuminata of the penis, twenty-five uncircumcised patients were treated with an application of 25% podophyllin in mineral oil. Twelve developed severe balanitis requiring dorsal slit operations. It was apparent that the complicating balanitis was caused by permitting the podophyllin to remain on the lesions and adjacent normal tissues for more than ten hours. Thirteen patients removed the application after three hours and the growth subsequently disappeared completely. Three of these patients required a second application. In all thirteen patients however the condylomata recurred within three to six weeks. One man previously circumcised was cured with two applications of five hours duration given five days apart. Ten patients were circumcised and were cured without local complications with one or two

five-hour applications. No recurrences were noted after three months in the circumcised patients treated with podophyllin.

CONCLUSION

1. The podophyllin treatment of condyloma acuminata of the penis is not an innocuous procedure.

2. In condylomata acuminata of the uncircumcised penis, circumcision is recommended with subsequent application of 25% podophyllin in mineral oil to be removed after five hours. A second treatment, if necessary, may be administered after five days.

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